

Residential Fish Collection by Boat-Mounted Electrofishing and Sample Processing for Organic Contaminant Analysis

1.0 OVERVIEW AND APPLICATION

This standard operating procedure describes field procedures for collecting resident fish from rivers, lakes, etc., and sample processing procedures for preparing fish carcass or fillet samples for organic contaminant analyses.

2.0 METHOD SUMMARY

Resident fish are collected by electrofishing from a boat, and processed for organic contaminant analysis as either fillet or whole carcass samples.

3.0 PROCEDURE

3.1 List of Equipment and Supplies

- Electrofishing unit. This will consist of:
 - electrofishing boat and trailer
 - electrodes
 - gasoline powered generator
 - control equipment to regulate voltage and current to the electrodes
 - wiring to provide safe transmission of current under operating conditions
 - switching, including a switch that keeps the circuit open unless actively and continuously closed (i.e., the "dead-man's switch")
 - dip nets with handles of non-conductive material
 - personal safety equipment including life vests, footwear with non-conductive soles, and non-conducting gloves
- Global positioning system, or mechanism for recording sampling location position
- Fillet knives
- Solvent-rinsed heavy duty aluminum foil
- Zip lock freezer bags
- Ice chests and ice
- Fish measuring board or tape measure
- Appropriate scale for weighing fish
- Appropriate forms and/or field notebook
- Laboratory chain of custody forms
- Tap water
- Methanol
- N-hexane
- Waste containers for methanol and hexane